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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,807	08/04/2003	Kar-Wing Edward Lor	58268.00238	4599
32294	7590	04/10/2007	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			SHAN, APRIL YING	
			ART UNIT	PAPER NUMBER
			2135	
SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE		DELIVERY MODE	
3 MONTHS	04/10/2007		PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/632,807	LOR ET AL.	
	Examiner	Art Unit	
	April Y. Shan	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 August 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-60 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-60 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 04 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/03 and 5/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-60 have been examined.
2. The preliminary amendment submitted by the Applicant on August 4, 2003 was entered and considered.

Priority

3. Examiner is aware of the application claims priority of U.S. Provisional Application No. 60/416,528, filed on October 8, 2002.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 21-40 and 51-60 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. Claims 21-40 and 51-60 are directed to a network device for controlling a flow of data in a wireless network. However, on page 50, paragraph [0156] of the instant application's specification, the Applicant discloses "The present invention can be implemented totally...through software." Therefore, it appears that the network device would reasonably be interpreted by one of ordinary skill in the art as software, per se. There is no element positively recited as part of the network device. As such, it believed that the apparatus of claims 21-40 and 51-60 are reasonably interpreted as functional descriptive material, per se.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-3, 9, 16-18, 21-23, 29, 36 – 38, 41-42, 49-52 and 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. (U.S. Patent No. 6,307,837) and in view of WaveLink SNC24 Version 4 Copyright 1996-2000 (hereinafter

WaveLink SNC 24) and WaveLink Mobile Manager Version 5.2 Users Guide Revised 6/18/2002 (hereinafter WaveLink Mobile Manager).

As per **claims 1 and 21**, Ichikawa et al. discloses a process/network device of controlling a flow of data in a wireless network providing wireless access to the wireless network (Wireless packet backbone network 1-5 in fig. 1 or Wireless packet backbone network 7-5 in fig. 8) by wireless devices (Wireless packet terminal 1-7 in fig. 1 or Wireless packet terminal 7-7 in fig. 8) comprising:

Receiving (col. 7, lines 49-51) data (a communication start up request signal 2-1 in fig. 2 and col. 7, lines 48-49) from a wireless device (wireless packet terminal 1-7 in fig. 1 or wireless packet terminal 7-7 in fig. 8 and “Further, wireless packet backbone network 7-5...has a plurality of relay nodes 7-9 for switching the packets...” – e.g. col. 11, lines 28-48. Please note wireless packet terminal 1-7, 7-7 correspond to Applicant’s wireless device) by a network device (Relay node 7-9 in fig. 8. Please note Relay node 7-9 corresponds to Applicant’s network device), through one access point of a plurality of access points (wireless base station 1-6 in fig. 1, wireless base station 7-6 in fig. 8, col. 7, line 9 and col. 11, lines 17-18. Please note wireless base station 1-6, 7-6 corresponds to Applicant’s access point (s)) in communication with the network device (Relay Node 7-9 in fig. 8 corresponds to Applicant’s network device), indicating a client identifier for the wireless device (“each user LAN has already been assigned with an identifier for identifying a user LAN” – e.g. col. 3, lines 55-57 and “a packet

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containing... and an attachment including the identifier of a user LAN..." – e.g. col. 3, line 65 – col. 4, line 3);

forwarding the client identifier to an authentication server (col. 7, lines 51-53);

mediating authentication of the wireless device with the authentication server

(e.g. col. 7, line 45 – col. 8, line 18, col. 11, lines 50-57 and fig. 8);

evaluating data packets received from portions of the wireless network and from the plurality of access points (e.g. col. 4, lines 3-11 and col. 9, lines 7-17 and abstract);

and

passing the received data packets to portions of the wireless network and to the plurality of access points, based on the evaluation of the received data packets (col. 8, lines 62-65 and col. 9, lines 17-43, col. 13, line 24 – col. 14, line 15 and abstract);

Ichikawa et al. does not expressly disclose:

wherein the network device periodically polls for a status of the wireless device from the access point and wherein the access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol.

- WaveLink SNC 24 and WaveLink Mobile Manager discloses wherein the network device periodically polls for a status of the wireless device from the access point and wherein the access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol (WaveLink

SNC 24, pages 14, 100, 115-117 and 119-121 and WaveLink Mobile Manager, pages 18-20, 55, 113-124).

It would have been obvious to a person with ordinary skill in the art to incorporate WaveLink SNC 24 and WaveLink Mobile Manager's the network device periodically polls for a status of the wireless device from the access point and access points and the network device exchange information relating to configuration, status, and client session statuses of the access points through a messaging protocol into Ichikawa et al.'s process/network device.

The motivation of doing so would have been "...automatically recognizes the presence of Access points on the network and a direct administrative interface to each individual Access Point", as taught by WaveLink SNC 24 (e.g. page 14) and allow an administrator to query Access Points, check the status of various associated Mobile Units and gather statistics about the wireless network for centralized management of wireless network infrastructure including access points (APs) and wireless switches to enhance the reliability and secure network.

As per **claims 2 and 22**, Ichikawa et al.- WaveLink SNC 24 – WaveLink Mobile Manager disclose a process/network device as applied in claims 1 and 21. Ichikawa et al. further discloses wherein said step of evaluating data packets comprises filtering of

the received data packets, such that filtered data packets can be dropped to limit an effectiveness of a denial of service attack (col. 9, lines 17-20 and lines 26-29).

As per **claims 3 and 23**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager disclose a process/network device as applied in claims 1 and 21. Ichikawa et al. further discloses wherein said step of mediating authentication of the wireless device comprises restricting access to the wireless network by the wireless device based on a category of user determined from the client identifier (e.g. col. 10, lines 4-29).

As per **claims 9 and 29**, WaveLink Mobile Manager further discloses wherein said step of passing the received data packets comprises forwarding updates to software and configurations of the plurality of access points to the plurality of access points from a single site on the wireless network through a single update (e.g. pages 4-5)

As per **claims 16 and 36**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager discloses a process/network device as applied in claims 1 and 21. WaveLink SNC 24 further discloses comprising:

receiving a re-association request from a transferring wireless device through a new access point of the plurality of access points, where the transferring wireless device was previously associated with an old access point of the plurality of access points (e.g. pages 115-117); providing session information for the transferring wireless device to the

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new access point (e.g. pages 115-117); and updating a routing table with a routing location of the transferring wireless device (e.g. pages 115-117).

As per **claims 17 and 37**, Ichikawa et al.- WaveLink SNC 24 further discloses comprising encapsulating received data packets with Internet protocol information associated with the new access point and updating routing information in a local routing table. (Ichikawa et al. col. 2, lines 20-49, WaveLink SNC 24, pages 115-117)

As per **claims 18 and 38**, WaveLink SNC 24 further discloses comprising: receiving a re-association request from a transferring wireless device through a new access point of the plurality of access points, where the transferring wireless device was previously associated with an alternate access point in communication with the wireless network through an alternate network device; sending a request for configuration information for the transferring wireless device from the alternate network device; and forwarding access point configuration data, determined from the configuration information for the transferring wireless device received from the alternate network device, to the new access point (e.g. pages 115-117).

As per **claim 41 and 51**, they are rejected using the same rationale as for the rejection of claims 1 and 21.

As per **claim 42 and 52**, they are rejected using the same rationale as for the rejection of claims 3 and 23

As per **claim 49 and 59**, they are rejected using the same rationale as for the rejection of claims 16 and 36.

As per **claim 50 and 60**, they are rejected using the same rationale as for the rejection of claims 17 and 37.

11. Claims 10-12, 30-32, 47 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager as applied to claims 1, 2, 3 and 21, 22, 23 above, and further in view of Awater et al. (U.S. Patent No. 7,173,918)

As per **claims 10 and 30**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager do not expressly disclose wherein coverage areas for at least two of the plurality of access points overlap and the process further comprises: monitoring usage by wireless devices of the at least two of the plurality of access points; and prompting the at least two of the plurality of access points to change the usage by the wireless devices such that a load carried by the at least two of the plurality of access points is approximately balanced.

Awater et al. discloses wherein coverage areas for at least two of the plurality of access points overlap and the process further comprises: monitoring usage by wireless devices of the at least two of the plurality of access points; and prompting the at least two of the plurality of access points to change the usage by the wireless devices such that a load carried by the at least two of the plurality of access points is approximately balanced (e.g. fig. 1, abstract, col. 3, line 5 – col. 5, line 14).

It would have been obvious to a person with ordinary skill in the art to incorporate Awater et al.'s coverage areas for at least two of the plurality of access points overlap and the process further comprises: monitoring usage by wireless devices of the at least two of the plurality of access points; and prompting the at least two of the plurality of access points to change the usage by the wireless devices such that a load carried by the at least two of the plurality of access points is approximately balanced into Ichikawa et al. – WaveLink SNC 24 – WaveLink.

The motivation of doing so would have been "to balance the traffic load of a wireless LAN by redistributing load over the cells in the network... a better overall throughput behaviour for the wireless LAN will be provided", as taught by Awater et al. (col. 3, lines 10-14)

As per **claims 11 and 31**, Awater et al. further discloses wherein load carried by the at least two of the plurality of access points is determined by at least one of a number of wireless devices using the at least two of the plurality of access points, a number of packets transmitted and received by the at least two of the plurality of access points and an average bandwidth carried by the at least two of the plurality of access points (e.g. col. 3, line 5 – col. 5, line 14).

As per **claims 12 and 32**, Awater et al. further discloses wherein load carried by the at least two of the plurality of access points is determined by at least one of priorities of packets recently transmitted and received by the at least two of the plurality of access points, a type of application running on the wireless devices and communicating with the at least two of the plurality of access points and a signal strength provided to the

wireless devices provided by the at least two of the plurality of access points (col. 3, line 5 – col. 5, line 14).

As per **claim 47 and 57**, they are rejected using the same rationale as for the rejection of claims 10 and 30.

12. Claims 13-14, 33-34, 48 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager as applied to claims 1, 2, 3 and 21, 22, 23 above, and further in view of Fink et al. (U.S. Patent No. 6,496,935).

As per **claims 13-14**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager do not disclose wherein said step of passing the received data packets comprises maintaining a priority indicated by the data packets and tagging the data packets with a priority tag to be evaluated by the access points and wherein said step of passing the received data packets comprises establishing a prioritization policy based on filtering of the data packets and tagging the data packets with a priority tag to be evaluated by the access points based on the established prioritization policy.

Fink et al. discloses passing the received data packets comprises maintaining a priority indicated by the data packets and tagging the data packets with a priority tag to be evaluated by the access points and wherein said step of passing the received data packets comprises establishing a prioritization policy based on filtering of the data packets and tagging the data packets with a priority tag to be evaluated by the access points based on the established prioritization policy (e.g. col. 6, line 65 – col. 7, line 16).

It would have been obvious to a person with ordinary skill in the art to incorporate Fink et al.'s passing the received data packets comprises maintaining a priority indicated by the data packets and tagging the data packets with a priority tag to be evaluated by the access points and wherein said step of passing the received data packets comprises establishing a prioritization policy based on filtering of the data packets and tagging the data packets with a priority tag to be evaluated by the access points based on the established prioritization policy into Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager.

The motivation of doing so would have been "the efficiency of packet filtration is increased" and "for rapid packet filtration", as disclosed by Fink et al. (e.g. col. 1, lines 11-12 and col. 2, line 12)

As per **claims 33 and 34**, they are rejected using the same rationale of rejecting claims 13 and 14 above.

As per **claim 48 and 58**, they are rejected using the same rationale as for the rejection of claims 13 and 33.

13. Claims 4, 8, 15, 24, 28, 35, 43 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager as applied to claims 1, 2, 3 and 21, 22, 23 above, and further in view of Engler et al. (U.S. Pub. No. 2005/0254652)

As per **claims 4 and 24**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager disclose a process/network device as applied in claims 3 and 23.

Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager does not expressly disclose wherein restricting access to the wireless network is based on a type of device to which the wireless device belongs.

Engler et al. discloses wherein restricting access to the wireless network is based on a type of device to which the wireless device belongs (e.g. paragraphs [0028]-[0031]).

It would have been obvious to a person with ordinary skill in the art to incorporate Engler et al.'s restricting access to the wireless network is based on a type of device to which the wireless device belongs.

The motivation of doing so would have been "improved method for automatically providing secure communications between devices over a wireless network", as taught by Engler et al. (e.g. paragraph [0005])

As per **claims 8 and 28**, Engler et al. further discloses wherein said step of mediating authentication of the wireless device comprises restricting access to the wireless network by the wireless device based on a type of an application, running on the wireless device, seeking network access for the wireless device (e.g. paragraph [0026]).

As per **claims 15 and 35**, Engler et al. further discloses comprising establishing a bandwidth usage policy for the wireless devices and instructing the plurality of access points to follow the established bandwidth usage policy (e.g. paragraph [0033]).

As per **claim 43 and 53**, they are rejected using the same rationale as for the rejection of claims 4 and 24.

14. Claims 5, 7, 19, 20 and 25, 27, 39, 40, 44, 46, 54 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager as applied to claims 1, 2, 3 and 21, 22, 23 above, and further in view of Numminen et al. (EP 1073294 provided by the Applicant)

As per **claims 5 and 25**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager disclose a process/network device as applied in claims 1 and 21. Ichikawa et al. discloses mediating authentication of the wireless device. But Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager do not disclose the claimed feature of restricting access to the wireless network by the wireless device based on an hour and a day of the week. However, such missing feature in the above combined references is clearly taught in col. 8, lines 14-18 aforementioned Numminent et al. reference, the same field endeavor of wireless network communication. It would have been obvious for a person having ordinary skill in the art at the time of the invention to incorporate such well known feature as taught in the Numminent et al. reference into the Ichikawa – WaveLink SNC 24 – WaveLink Mobile Manager's process/network device motivated by “....a high service quality can be maintained at all times for company members”, as taught by col. 8, lines 19-22 of Numminent et al.

As per **claims 7 and 27**, Numminen et al. further discloses wherein said step of mediating authentication of the wireless device comprises restricting access to the wireless network by the wireless device based on a physical location of the one access point of a plurality of access points (paragraph [0045]).

As per **claims 19 and 39**, Ichikawa et al. – WaveLink SNC 24 – WaveLink disclose a process/network device as applied in claims 1 and 21. Numminen et al. further discloses wherein the wireless device is a wireless internet protocol phone (paragraph [0019] and [0023]) the client identifier is call setup data (col. 7, lines 46-52) and said step of passing the received data packets comprises passing voice over internet protocol data packets to portions of the wireless network and to the plurality of access points, based on the evaluation of the received voice over internet protocol data packets (paragraph [0019]-[0021] and paragraph [0030]-[0031]).

As per **claims 20 and 40**, Numminen et al. further discloses wherein said step of mediating authentication of the wireless device with the authentication server comprises: sending a call connected signal received from an Internet protocol phone gateway to the one access point (col. 7, lines 43-46); and mediating a negotiation of network resources between the Internet protocol phone gateway and the wireless Internet protocol phone (col. 7, line 44 – col. 8, line 9).

As per **claim 44 and 54**, they are rejected using the same rationale as for the rejection of claims 5 and 25.

As per **claim 46 and 56**, they are rejected using the same rationale as for the rejection of claims 7 and 27.

15. Claims 6, 26, 45 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager – Numminen et al. as applied to claims 5 and 25 above, and further in view of Engler et al. (U.S. Pub. No. 2005/0254652).

As per **claims 6 and 26**, Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager – Numminen et al. do not expressly disclose wherein restricting access to the wireless network is based on at least one of a type of device to which the wireless device belongs and on a category of user determined from the client identifier

Engler et al. discloses wherein restricting access to the wireless network is based on at least one of a type of device to which the wireless device belongs and on a category of user determined from the client identifier (e.g. paragraphs [0028]-[0031]).

It would have been obvious to a person with ordinary skill in the art to incorporate Engler et al.'s restricting access to the wireless network is based on at least one of a type of device to which the wireless device belongs and on a category of user determined from the client identifier

into Ichikawa et al. – WaveLink SNC 24 – WaveLink Mobile Manager – Numminen et al.

The motivation of doing so would have been "improved method for automatically providing secure communications between devices over a wireless network", as taught by Engler et al. (e.g. paragraph [0005])

As per **claim 45 and 55**, they are rejected using the same rationale as for the rejection of claims 6 and 26.

Double Patenting

16. Claims 41 and 51 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1 and 21. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

17. Claims 44 and 54 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 5 and 25. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

18. Claims 45 and 55 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 6 and 26. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

19. Claims 47 and 57 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 10 and 30. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in

wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

20. Claims 48 and 58 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 13 and 33. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

21. Claims 49 and 59 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 16 and 36. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

22. Claims 50 and 60 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 17 and 37. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO – 892)

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AYS
29 March 2007
AYS

H.T.S.
HOSUK SONG
PRIMARY EXAMINER